

Contents

Volume 251

MIROSLAV FIEDLER AND VLASTIMIL PTÁK (Praha, The Czech Republic) A New Positive Definite Geometric Mean of Two Positive Definite Matrices	1
FUZHEN ZHANG (Fort Lauderdale, Florida) Quaternions and Matrices of Quaternions	21
Matjaž Omladič (Ljubljana, Slovenia) and Heydar Radjavi (Halifax, Nova Scotia, Canada) Irreducible Semigroups With Multiplicative Spectral Radius	59
G.-Y. LEE (Chung-Nam, Korea), S.-G. LEE (Suwon, Korea), AND H.-G. SHIN (Chon-Buk, Korea) On the K -Generalized Fibonacci Matrix Q_k^*	73
RITSUO NAKAMOTO (Hitachi, Ibaraki, Japan) The Spherical Gap of Operators	89
CHARLES R. JOHNSON (Williamsburg, Virginia) AND JEREMY MILLER (Ashland, Virginia) Rank Decomposition Under Combinatorial Constraints	97
JAVIER TOLSA AND MIQUEL SALICHS (Barcelona, Spain) Convergence of Singular Perturbations in Singular Linear Systems	105
FRANK CRITCHLEY (Edgbaston, Birmingham, United Kingdom) AND BERNARD FICHET (Marseille, France) On (Super-) Spherical Distance Matrices and Two Results From Schoenberg	145
M. GRAÇA MARQUES, FERNANDO C. SILVA (Lisboa, Portugal), AND ZHANG YU LIN (Coimbra, Portugal) The Number of Invariant Polynomials of a Matrix With Prescribed Complementary Principal Submatrices	167
WILLARD L. MIRANKER (New Haven, Connecticut) A Cache for an Associative Memory	181
G. HEINIG (Safat, Kuwait), L. A. SAKHNOVICH, AND I. F. TIDNIUK (Odessa, Ukraine) Paired Cauchy Matrices	189
LUZIUS GRUNENFELDER AND TOMAŽ KOŠIR (Halifax, Nova Scotia, Canada) On a Representation of Commuting Maps by Tensor Products	215

Table of Contents continued

J. P. HENNIGER (Peterborough, Ontario, Canada)	
Factorization and Similarity in $GL(2, \mathbb{Z})$	223
M. Q. RIECK (Tampa, Florida)	
Totally Isotropic Subspaces, Complementary Subspaces, and Generalized Inverses	239
L. LOPEZ AND T. POLITI (Bari, Italy)	
Tridiagonal Splittings in the Conditioning and Parallel Solution of Banded Linear Systems	249
M. M. KONSTANTINOV, P. HR. PETKOV, D.-W. GU, AND I. POSTLETHWAITE (Leicester, United Kingdom)	
Perturbation Analysis of Orthogonal Canonical Forms	267
VAIDYANATH MANI (Atlanta, Georgia) AND ROBERT E. HARTWIG (Raleigh, North Carolina)	
Generalized Polynomial Bases and the Bezoutian	293
C. JANSSON (Hamburg, Germany)	
Calculation of Exact Bounds for the Solution Set of Linear Interval Systems	321
HARI BERCOVICI, WING SUET LI, AND THOMAS SMOTZER (Bloomington, Indiana)	
Classical Linear Algebra Inequalities for the Jordan Models of C_0 Operators	341
HAJA N. RAZAFINJATOVO (Harrisonburg, Virginia)	
Discrete Irregular Sampling With Larger Gaps	351
AUTHOR INDEX	373